

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/903,656	07/13/2001	Sang IL Seo	0630 - 1284P	1832
2292 7	7590 11/10/2003		EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747			NATNAEL, PAULOS M	
FALLS CHURCH, VA 22040-0747			ART UNIT	PAPER NUMBER
			2614	γ
			DATE MAILED: 11/10/2003	کہ

Please find below and/or attached an Office communication concerning this application or proceeding.

			dh		
		Application No.	Applicant(s)		
		09/903,656	SEO ET AL.		
	Office Action Summary	Examiner	Art Unit		
		Paulos M. Natnael	2614		
Perio	The MAILING DATE of this communication and for Reply	ppears on the cover sheet with the o	correspondence address		
T) - - - -	SHORTENED STATUTORY PERIOD FOR REP HE MAILING DATE OF THIS COMMUNICATION Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. If the period for reply specified above is less than thirty (30) days, a re if NO period for reply is specified above, the maximum statutory perior Failure to reply within the set or extended period for reply will, by statu. Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	I. 1.136(a). In no event, however, may a reply be tile 1.136(a). In no event, however, may a reply be tile 1.136(a). In no event, however, may a reply be tile 2.14 apply and will expire SIX (6) MONTHS from 2.14 apply and will expire SIX (6) MONTHS from 2.15 application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. (D) (35 U.S.C. § 133).		
1)	Responsive to communication(s) filed on	<u> </u>			
2a)	☐ This action is FINAL . 2b)⊠ 1	This action is non-final.			
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims					
4)	oxtimes Claim(s) <u>1-4</u> is/are pending in the application	n.			
	4a) Of the above claim(s) is/are withdr	rawn from consideration.			
5)	Cłaim(s) is/are allowed.				
6)	6)⊠ Claim(s) <u>1-4</u> is/are rejected.				
7)	Claim(s) is/are objected to.		•		
8) Claim(s) are subject to restriction and/or election requirement.					
	cation Papers				
9) The specification is objected to by the Examiner.					
10)	☐ The drawing(s) filed on is/are: a)☐ acc				
11\	Applicant may not request that any objection to the The proposed drawing correction filed on	• • •	• •		
11)		_	oved by the Examiner.		
If approved, corrected drawings are required in reply to this Office action. 12)☐ The oath or declaration is objected to by the Examiner.					
Priority under 35 U.S.C. §§ 119 and 120					
	Acknowledgment is made of a claim for foreign	an priority under 35 LLS C & 110/	a) (d) or (f)		
.0,	a) ☐ All b) ☐ Some * c) ☐ None of:	gir priority under 55 0.5.0. § 119(a	1)-(u) or (i).		
	· <u> </u>	nts have been received			
 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 					
	Copies of the certified copies of the priority documents have been received in this National Stage				
	application from the International E * See the attached detailed Office action for a list	Bureau (PCT Rule 17.2(a)).	-		
14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).					
a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.					
Attachi					
2) 🔲 1	Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal	y (PTO-413) Paper No(s) Patent Application (PTO-152)		

U.S. Patent and Trademark Office PTOL-326 (Rev. 04-01) Art Unit: 2614

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims **1 and 3** are rejected under 35 U.S.C. 102(e) as being anticipated by Shintani, U.S. Pat. No. 6,490,002.

Considering claim 1, the claimed

- a) a process of judging whether a transmission is OSD transmission or not, is met by the disclosure "Selection of the analog signal can be carried out by an auto-detect function built into the HDTV, such as a switching device 370, or by sensing the presence of the OSD information via a superimposed DC level on the chroma signal or in the digital transport stream". (col. 6, lines 14-18)
- b) a process of transmitting the OSD through a analog connect if the transmission is judged as the OSD transmission, is met by the disclosure that "When an OSD signal is available for use and [sic] display on the HDTV monitor, the HDTV switches the monitor's signal source to the analog input, thereby allowing the HDTV to display and

Art Unit: 2614

utilize the OSD of the STB, such as for channel navigation." (col. 3, line 66 to col. 4, line 3)

Considering claim 3, the claimed wherein the digital AV contents are transmitted through a digital connect during the OSD is transmitted through the analog connect, is met by the digital path 160, fig.1;

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shintani, U.S. Pat. No. 6,490,002.

Considering claim 2, the claimed method wherein the OSD is transmitted through the analog connect only when the volume of the OSD is larger than a certain volume.

See rejection of claim 4;

Considering claim 4, the claimed system for displaying the digital contents and the OSD by connecting a signal output apparatus and a signal input apparatus, the signal output

Application/Control Number: 09/903,656

Art Unit: 2614

apparatus including a first controlling unit for controlling an OSD generating unit so that the OSD is transmitted through the analog connect if the volume of the OSD is larger than a certain volume; and the signal input apparatus including a second controlling unit for controlling a video display unit so that an OSD input terminal is switched into an analog terminal when the OSD larger than a certain volume is transmitted from the signal output apparatus by communicating with the first controlling unit.

Regarding claim 4, Shintani discloses a supplemental data path for supporting on-screen display from external sources in a TV monitor using a secondary analog signal path. Shintani discloses a CPU 240 for controlling the STB 100, and another CPU controls the operation of the receiver 120. Shintani teaches that the OSD information may be transmitted along with the digital transport stream, along with the HD digital data, via a high speed digital interface. (col. 3, lines 24-28) Shintani further teaches "in the case where the video and OSD signals are simply superimposed, an inexpensive CMOS switch can be used if the signal bandwidth is not very large," (col. 5, lines 65 through col. 6, lines 1) suggesting that signal bandwidth and/or volume must be taken into account when choosing a transmission path. Therefore, it would have been obvious to the skilled in the at the time the invention was made to modify the system of Shintani by implementing the method whereby when the signal bandwidth or volume is large the OSD would be transmitted through the analog path, in order to prevent over loading the digital path and slowing the high speed video transmission.

Application/Control Number: 09/903,656

Art Unit: 2614

Conclusion

Page 5

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ludtke et al., U.S. Pat. No. 6,593,937 discloses method of handling high bandwidth on-screen display graphics data over a distributed IEEE 1394 network.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paulos M. Natnael whose telephone number is (703) 305-0019. The examiner can normally be reached on 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (703) 305-4795. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4750.

MICHAEL H. LEE PRIMARY EXAMINER

Paulos Natnael Prw/ October 30, 2003

. 4